

Product datasheet for **MC221836**

Sort1 (NM_019972) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sort1 (NM_019972) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sort1
Synonyms:	2900053A11Rik; AI852375; Ntr3; Ntsr3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221836 representing NM_019972
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCGGCCCGGGGAGCTGCGGACGGCCTTTTGGCTGGCCCTCGCCTCCTCTGCTCCTTCAAC
 TGCTGCCTCCTGCCGCCGTCGGCCAGGACCGGCTGGACGCGCCGCGCCCGCCGCGCTCCTCTGCTGCG
 CTGGGCCGGTCCGGTCCGGGTGAGCTGGGGCTGCGCGCCGCGCGCCGGGGGCCCGTCCCCCGCGCT
 GGCCGTTGGCGCCGCGCGCCGCCGAGGACCAAGACTGCGGCCGCTCCCGACTTCATCGCCAAGC
 TGACCAACAATACGCACCAGCATGTCTTTGATGACCTCAGTGGCTCAGTGTCTTGTCTGGGTTGGAGA
 CAGCACTGGGGTATTCTCGTCTGACCCTTTCCAAGTGCCTCTGGTAATTGTGAGCTTTGGACAGTCC
 AAGTTGTATCGAAGTGAAGATTATGAAAGAACTTAAGGATATTACAAATCTCATCAATAACACCTTCA
 TTCGGACGGAATTTGGCATGGCTATTGGTCTGAGAACTCTGAAAGGTGATACTAACAGCGGAGGTGTC
 CGGGGGAAGCCGAGGCGGAAGAGTGTTCAGGTCATCAGACTTTGCCAAGAACTTTGTGCAACAGATCTC
 CCCTTTCATCCTCTGACGCAGATGATGTACAGCCCTCAGAATTCGATTACCTGTAGCTCTCAGCACCG
 AAAATGGCCTGTGGGTGTCCAAGAATTTGGGGAAAAATGGGAAGAAATCCACAAAGCAGTATGTTTGGC
 CAAATGGGGACCAACAACATCATCTTCTTTACCACCCATGTGAATGGCTCCTGCAAAGCTGATCTTGGT
 GCCCTGGAATTATGGAGAACATCCGACTTGGGAAAAACCTTCAAACCATTTGGTGTGAAAATCTACTCCT
 TTGGTCTTGGGGCCGTTTCTTTTGCCTCTGTGATGGCTGATAAGGACACAACAAGAAGGATCCATGT
 GTCAACAGACCAGGGGACACATGGAGCATGGCACAACCTCTTCTGTGGGACAGGAACAGTTCTACTCC
 ATCCTGGCAGCCAATGAGGACATGGTCTTCATGCATGTAGATGAACCTGGAGATACCGGGTTTGGCACCA
 TCTTTACCTCTGATGATCGAGGCAATTGTCTACTCCAAGTCTCTGGACAGACATCTATACCACACAGG
 CGGGGAGACGGACTTTACCAACGTGACTTCCCTCCGTGGGGTCTATATAACAAGCACGCTCTCAGAAGAT
 AACTCTATTACAGCATGATCACTTTTACCAGGGAGGACGGTGGGAGCACCTGCGGAAGCCGGAGAACA
 GCAAGTGCAGCGTACCACAAAGAACAAGAACGAGTGCAGCCTTCATATCCATGCTTCTTATAGCATCTC
 CCAGAAGCTAAACGTTCCAATGGCCCACTTCCGAGCCCAATGCTGTGGGCATAGTCACTCAGCTCAGGT
 AGTGTGGGAGATGCCATCTCGGTGATGGTCCCAGATGTGTACATCTCAGATGATGGGGTTACTCCTGGG
 CGAAGATGCTAGAAGGACCACATTACTATACCATCCTGGACTCTGGAGGCATCATTGTGGCCATTGAGCA
 CAGCAACCGTCTATCAATGTGATTAAGTTCTCCACAGATGAAGGCCAGTCTGGCAGAGCTATGTGTT
 ACACAGGAGCCCTACTTCACTGGGCTTGTCTCCGAGCCTGGAGCCAGTCCATGAACATCAGCATCT
 GGGGATTCACAGAGTCTTTCATTACCCGCCAGTGGGTCTCCTACACAGTCGATTTCAAAGACATCCTTGA
 GCGGAATTGTGAAGAGGATGACTATACCAGTGGCTGGCACACTCCACAGACCCTGGAGATTACAAAGAC
 GGCTGCATTTTGGGCTATAAAGAACAGTTCCTACGGCTACGGAAGTCATCCGTCTGTGAGAATGGTCGAG
 ACTATGTTGTGGCCAAGCAGCCATCCGTCTGTCCGTGTTCCCTGGAGGACTTCTCTGTGACTTTGGCTA
 CTTCCGTCCGAGAACGCCTCAGAGTGGTGGAGCAGCCTGAACTGAAGGGGCATGAGTTAGAGTTCTGT
 CTGTACGGCAAGGAGGAGCACCTGACAACAAATGGGTACCGGAAAATCCCAGGAGACAAATGCCAAGGTG
 GGATGAATCCCAGCAGAGAAGTAAAAGACTTAAAAAGAAATGCACAAGCAACTTCTTGAACCCACAAA
 GCAGAATCCAAGTCAAATCTGTCCCTATTATCCTGGCCATCGTGGGACTGATGCTTGTACAGTCGTA
 GCAGGAGTCTCATTGTGAAGAAATATGTCTGTGGCGGAAGGTTCTGGTGCACCGGTACTCGGTGCTAC
 AGCAGCACGCAGAGGCTGACGGCTAGAGGCTTTGGATTCAACCTCCACGCTAAAAGCGGATATCACGA
 CGACTCAGATGAGGACCTCTGGAA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja2475_e07.zip

Restriction Sites: SgfI-MluI

ACCN: NM_019972

Insert Size: 2478 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_019972.3](#), [NP_064356.2](#)

RefSeq Size: 6851 bp

RefSeq ORF: 2478 bp

Locus ID: 20661

UniProt ID: [Q6PHU5](#)

Cytogenetics: 3 F3

Gene Summary:

Functions as a sorting receptor in the Golgi compartment and as a clearance receptor on the cell surface. Required for protein transport from the Golgi apparatus to the lysosomes by a pathway that is independent of the mannose-6-phosphate receptor (M6PR). Also required for protein transport from the Golgi apparatus to the endosomes. Promotes neuronal apoptosis by mediating endocytosis of the proapoptotic precursor forms of BDNF (proBDNF) and NGFB (proNGFB). Also acts as a receptor for neurotensin. May promote mineralization of the extracellular matrix during osteogenic differentiation by scavenging extracellular LPL. Probably required in adipocytes for the formation of specialized storage vesicles containing the glucose transporter SLC2A4/GLUT4 (GLUT4 storage vesicles, or GSVs). These vesicles provide a stable pool of SLC2A4 and confer increased responsiveness to insulin. May also mediate transport from the endoplasmic reticulum to the Golgi.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.